

# Monmouth County



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# 1603 Dumont Terrace

1603 Dumont Terrace

Wall Township

Monmouth County

**BLOCK:** 261      **LOT:** 7

**CATEGORY:** Non-Superfund  
State Lead, IEC

**TYPE OF FACILITY:** Private Residence  
**OPERATION STATUS:** Not Applicable

**PROPERTY SIZE:** 0.25 Acre

**SURROUNDING LAND USE:** Residential/Commercial

**MEDIA AFFECTED**

Ground Water

**CONTAMINANTS**

Volatile Organic Compounds

**STATUS**

Monitoring

Air

Volatile Organic Compounds

Monitoring

**FUNDING SOURCES**

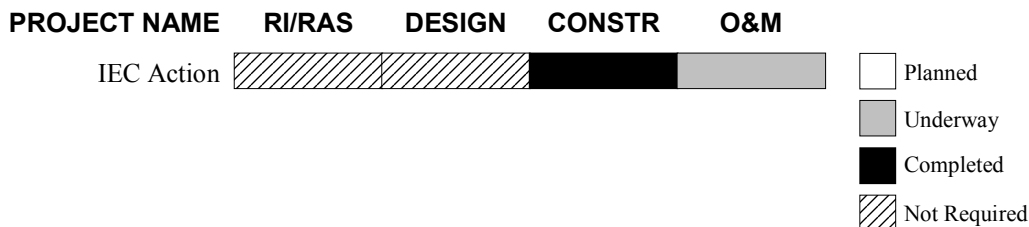
Corporate Business Tax

**AMOUNT AUTHORIZED**

\$275,000

**SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:**

This site is a residential property located approximately 1,500 feet from the Shark River. It was designated an Immediate Environmental Concern (IEC) in 1998 when the owner of the home reported strong gasoline-like odors in the basement and analysis of a water sample collected from the sump revealed high levels of the volatile organic compounds benzene and methyl tertiary-butyl ether (MTBE). NJDEP's Remedial Response Element installed a new sump pump in the basement along with a carbon treatment unit to remove the volatile organic compounds from the sump water before it is discharged to the storm sewer. A preliminary investigation subsequently revealed a localized, narrow plume of gasoline-contaminated ground water beneath the residence and identified a nearby service station as the likely source. The Remedial Response Element is periodically sampling the ground water to monitor the contaminant plume. The operator of the service station is conducting a Remedial Investigation to delineate the soil and ground water contamination at his property.



# Arky Property

217 Route 520

Marlboro Township

Monmouth County

**BLOCK:** 268      **LOT:** 79

**CATEGORY:** Non-Superfund  
State Lead

**TYPE OF FACILITY:** Automobile Junkyard  
**OPERATION STATUS:** Active

**PROPERTY SIZE:** 22 Acres

**SURROUNDING LAND USE:** Residential

## MEDIA AFFECTED

Ground Water

## CONTAMINANTS

Volatile Organic Compounds  
Metals

## STATUS

Delineating

Soil

Volatile Organic Compounds  
Polychlorinated Biphenyls (PCBs)

Partially Removed/Delineated

## FUNDING SOURCES

Spill Fund  
1986 Bond Fund  
Corporate Business Tax  
General State Funds













## AMOUNT AUTHORIZED





\$30,000  
\$336,000  
\$968,000  
\$126,000

## SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The site encompasses 22 acres, seven of which are used as an automobile junkyard. A portion of the junkyard was once used as a dump for drums, sludges, liquid wastes, tires and other debris. In 1987, the Superior Court of New Jersey ordered NJDEP to conduct an investigation of the former disposal area to determine the scope of the contamination and cost to remediate the site. Between 1988 and 1991, NJDEP's Remedial Response Element implemented an Interim Remedial Measure (IRM) to remove 22 buried drums and conducted an initial investigation that confirmed the ground water at the site was contaminated. Sampling of nearby private potable wells that was performed as part of the initial investigation showed that they had not been affected. The Superior Court of New Jersey issued a judgment against the Responsible Party in 1996 for 100% of the past costs incurred by the State.

Between 1998 and 2001, NJDEP conducted a second IRM to excavate and dispose of 70 buried drums of chemical wastes and approximately 1,000 cubic yards of contaminated soil and completed a Remedial Investigation and Remedial Action Selection (RI/RAS) for the site. The RI/RAS revealed that the surface soil within a 1.25-acre area of the junkyard is contaminated with polychlorinated biphenyls (PCBs) and the ground water at the site is contaminated with volatile organic compounds, including trichloroethylene (TCE) and methyl tertiary-butyl ether (MTBE). However, NJDEP concluded that there are no potable wells or other receptors downgradient of the site and that the volatile organic contamination in the ground water may diminish naturally through biodegradation. Based on the findings of the RI/RAS, NJDEP issued a Decision Document in 2002 that required excavation and disposal of approximately 2,000 cubic yards of PCB-contaminated soil and long-term monitoring of the ground water to verify that natural attenuation is occurring. NJDEP has installed additional monitor wells near the site and long-term ground water monitoring is scheduled to start in mid-2003. The soil removal is also scheduled to start in mid-2003, following court approval.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
IRM-Drum Removal I				
IRM-Drum Removal II				
Sitewide				

 Planned  
 Underway  
 Completed  
 Not Required

# Bog Creek Farm

Herbertsville Road

Howell Township

Monmouth County

**BLOCK:** 46      **LOT:** 29

**CATEGORY:** Superfund  
Federal Lead

**TYPE OF FACILITY:** Illegal Dump  
**OPERATION STATUS:** Inactive

**PROPERTY SIZE:** 12 Acres

**SURROUNDING LAND USE:** Agricultural/Recreational

## MEDIA AFFECTED

Ground Water

## CONTAMINANTS

Volatile Organic Compounds

## STATUS

Treating

Soil

Volatile Organic Compounds  
Pesticides  
Metals

Partially Remediated/Delineating

Sediments

Volatile Organic Compounds  
Pesticides

Remediated

## FUNDING SOURCES

## AMOUNT AUTHORIZED

Superfund	\$30,250,000
Spill Fund	\$202,000
1981 Bond Fund	\$257,000
1986 Bond Fund	\$1,034,000
Hazardous Discharge Site Cleanup Fund	\$1,743,000

## SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Bog Creek Farm is located in a rural area that is primarily agricultural and recreational in nature. Allaire State Park is located within 1/2 mile of the site. The north branch of Squankum Brook forms the northern border of the site. A pond and a wetlands area (also known as the "bog") are located near the northern border of the site. Between 1973 and 1974, solid and liquid chemical wastes and sludges were discharged to open areas and pits at a four-acre area of the property. Approximately 2,400 cubic yards of wastes, including organic solvents, paint residues, disinfectants and general debris were reportedly disposed of in this manner. Chemicals migrated via the ground water to the pond, bog and Squankum Brook. In 1983, USEPA added Bog Creek Farm to the National Priorities List of Superfund sites (NPL). The site owner subsequently pumped the liquid wastes from the pits, transported the wastes to an approved off-site landfill and backfilled the pits.





In 1983, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil, ground water and sediments and evaluate cleanup alternatives. The initial findings of the RI/FS confirmed that the soil at the waste disposal pits and the wastewater and sediments in the pond and bog were contaminated. In 1985, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that required removal of the contaminated wastewater and sediments from the pond and bog, excavation of the buried wastes and contaminated soil, and incineration of the excavated materials. The ROD also required an evaluation of innovative technologies to address residual soil contamination and a monitoring program to assess the effectiveness of the remedial action. USEPA completed the soil and sediment remedial action in 1990. Approximately 15,000 cubic yards of contaminated soil and sediments were excavated, incinerated and backfilled on site during the cleanup.

USEPA also concluded based on the RI/FS that the ground water at the site was contaminated with volatile organic compounds and contaminated sediments were present in Squankum Brook. In 1989, after completing the RI/FS, USEPA issued a second ROD with NJDEP concurrence that required installation of a remediation system to extract and treat the contaminated ground water and excavation and incineration of the contaminated brook sediments. Incineration of the contaminated sediments was completed in 1990 during the soil remedial action. USEPA completed construction of the ground water remediation system in 1994 and is operating and maintaining the system.

In 2002, USEPA delineated areas of subsurface soil contamination that were not removed during the soil cleanup and completed an optimization study for the site. USEPA is evaluating options to remediate the subsurface soil contamination, which may accelerate the ground water remedial action.

# Bog Creek Farm

(Continued from previous page)

PROJECT NAME	RI/FS	DESIGN	CONSTR	O&M	
Source Area					 Planned
Soil & Plume					 Underway
					 Completed
					 Not Required

# Burnt Fly Bog

## Texas & Spring Valley Roads

Marlboro Township

Monmouth County

**BLOCK:** 146      **LOT:** Upland Area: 47  
Tar Patch: 7  
N. Wetlands: 8  
W. Wetlands: Various

**CATEGORY:** Superfund  
State Lead

**TYPE OF FACILITY:** Waste Oil Storage  
**OPERATION STATUS:** Inactive

**PROPERTY SIZE:** 1,700 Acres

**SURROUNDING LAND USE:** Undeveloped/Residential

<b>MEDIA AFFECTED</b>	<b>CONTAMINANTS</b>	<b>STATUS</b>
Surface Water (Wetlands)	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Delineated
Soil	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Partially Removed/Delineated
Sediment	Petroleum Hydrocarbons Volatile Organic Compounds Polychlorinated Biphenyls (PCBs) Lead	Delineated

<b>FUNDING SOURCES</b>	<b>AMOUNT AUTHORIZED</b>
Superfund	\$57,421,000
Spill Fund	\$2,219,000
1981 Bond Fund	\$32,000
1986 Bond Fund	\$884,000
General State Fund	\$898,000
Corporate Business Tax	\$2,489,000

### SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Burnt Fly Bog site is located on a ground water discharge area of the Englishtown aquifer, where ground water flows to the surface and drains into Deep Run, a nearby creek. During the 1950s and 1960s, waste oil was stored in several unlined lagoons encompassing a 10-acre area of the property. The lagoon area became known as the "Uplands." Waste oil from the Uplands eventually contaminated other areas, which became known as the "Northerly Wetlands," the "Tar Patch," and the "Westerly Wetlands." In addition, adjacent to the Westerly Wetlands is the "Downstream Area," where contaminated sediments that migrated from upgradient areas had settled in a stream bed. While the entire Burnt Fly Bog encompasses about 1,700 acres, the areas of contamination are limited to approximately 60 noncontiguous acres.

USEPA added Burnt Fly Bog to the National Priorities List of Superfund sites (NPL) in 1983. Later that year, NJDEP completed a Remedial Investigation and Feasibility Study (RI/FS) and issued a Record of Decision (ROD) with USEPA concurrence that required remediation of the Uplands. Between 1985 and 1989, NJDEP conducted several remedial actions in the Uplands including the removal of waste referred to as the "Asphalt Pile," removal of lagoon liquids, excavation and off-site disposal of approximately 85,000 tons of contaminated soil, stabilization of sludge and installation of a clay cap over the area. Remediation of the Uplands area was completed in 1992, after NJDEP removed about 700 tons of stockpiled PCB-contaminated soil and transported it off site for incineration.

















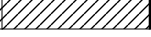











In 1988, NJDEP issued a ROD with USEPA concurrence for the Westerly Wetlands. The ROD required the evaluation of innovative technologies to address the contaminated soils at this area, with interim measures to contain the contamination while the evaluations were being conducted. The interim measures included installation of a fence around the Westerly Wetlands, removal of contaminated soil and sediments from the Downstream Area, and the installation of a sedimentation basin to prevent

# Burnt Fly Bog

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contaminated sediments from the Westerly Wetlands and other areas from migrating off site. NJDEP completed excavation and off-site disposal of approximately 12,000 tons of contaminated soil and sediments from the Downstream Area and construction of the sedimentation basin in 1996. NJDEP is maintaining the sedimentation basin and sampling the surface water and sediments in Burnt Fly Brook, which receives water from the basin, on a regular basis. Access to the Westerly Wetlands is being prevented by a security fence that was installed pursuant to the 1988 ROD.

In 1998, after completing a supplemental Feasibility Study for the site, USEPA signed a ROD with NJDEP concurrence for the Westerly Wetlands, Northerly Wetlands and the Tar Patch. The ROD required excavation and disposal of contaminated soil from the Northerly Wetlands and the Tar Patch followed by backfilling of these areas with clean materials and reestablishment of the wetlands, and no action for the Westerly Wetlands except for long-term biological sampling to monitor the impact of the contaminants on wildlife. NJDEP completed the Remedial Design for the cleanup action in 2002 and plans to begin excavating the contaminated soil in mid-2003.

PROJECT NAME	RI/FS	DESIGN	CONSTR	O&M	
Lagoon Liquid Removal (Uplands)					 Planned
Asphalt Removal (Uplands)					 Underway
Uplands (OU1)					 Completed
IRM-Incinerate PCBs >500 (Uplands)					 Not Required
W. Wetlands & Downstream Areas (OU2)					
N. Wetlands, Tar Patch & Westerly Wetlands (OU3)					

# Imperial Oil Company Incorporated/Champion Chemical

Orchard Place                      Marlboro Township                      Monmouth County

**BLOCK:** 122      **LOT:** 29

**CATEGORY:** Superfund  
State Lead

**TYPE OF FACILITY:** Oil Blending & Repackaging  
**OPERATION STATUS:** Active

**PROPERTY SIZE:** 15 Acres

**SURROUNDING LAND USE:** Residential

<b>MEDIA AFFECTED</b>	<b>CONTAMINANTS</b>	<b>STATUS</b>
Ground Water	Volatile Organic Compounds Semi-Volatile Organic Compounds Petroleum Hydrocarbons Metals	Delineated
Sediments	Semi-Volatile Organic Compounds Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Metals	Delineated
Soil	Volatile Organic Compounds Petroleum Hydrocarbons Polychlorinated Biphenyls (PCBs) Metals	Partially Removed/Delineated

<b>FUNDING SOURCES</b>	<b>AMOUNT AUTHORIZED</b>
Superfund	\$22,574,000
Spill Fund	\$4,000
1981 Bond Fund	\$14,000
1986 Bond Fund	\$1,619,000
Corporate Business Tax	\$58,000

## **SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:**

This site has an extensive history of industrial operations dating to 1912. A chemical plant manufactured arsenic-containing compounds at the site in the early part of the century. In 1950, Champion Chemical Company acquired the property and converted it into an oil reclamation facility. Champion Chemical used filter clay and caustic solutions to remove heavy metals and PCBs from waste oil. Since 1969, the Imperial Oil Company has blended and repackaged unused oil at the site under a lease agreement with Champion Chemicals. USEPA added the Imperial Oil/Champion Chemicals property to the National Priorities List of Superfund sites (NPL) in 1983 after sampling showed that a large waste filter clay pile and the soil at the site were highly contaminated with petroleum hydrocarbons, heavy metals and PCBs.

In 1985, NJDEP began a Remedial Investigation (RI) to determine the nature and extent of the contamination at the site. The RI confirmed that both on-site and off-site soils had been contaminated by industrial operations at the facility. In addition, the RI revealed that the underlying Englishtown Aquifer was contaminated and a substantial volume of residual oil product was floating on the water table underneath the waste filter clay pile. Contamination was also found in the sediments of Birch Swamp Brook, which originates near the northeastern border of the site and drains into Lake Lefferts, approximately 1.25 miles away. Due to the size of the property and the complexity of the issues to be addressed, NJDEP has divided the investigation and remediation of the site into several Operable Units (OU): off-site soil that is contaminated with heavy metals and PCBs, and the contaminated sediments in Birch Swamp Brook (OU1); the contaminated ground water (OU2); and on-site soil contaminated with volatile organic compounds, petroleum hydrocarbons, heavy metals and PCBs (OU3). NJDEP performed separate Feasibility Studies (FS) for each OU to evaluate cleanup alternatives and selected the appropriate remedies as detailed below.

**Off-site soil and sediments (OU1):** In 1990, USEPA issued a Record of Decision (ROD) with NJDEP concurrence for OU1 that required installation of a fence around the off-site area to restrict access to contaminated soils, excavation and off-site disposal of contaminated soils and restoration of the affected wetlands. Soil sampling conducted in 1995 during the Remedial Design revealed an unanticipated sporadic pattern of arsenic contamination, some of which was detected at off-site residential properties.



# Imperial Oil Company Incorporated/Champion Chemical

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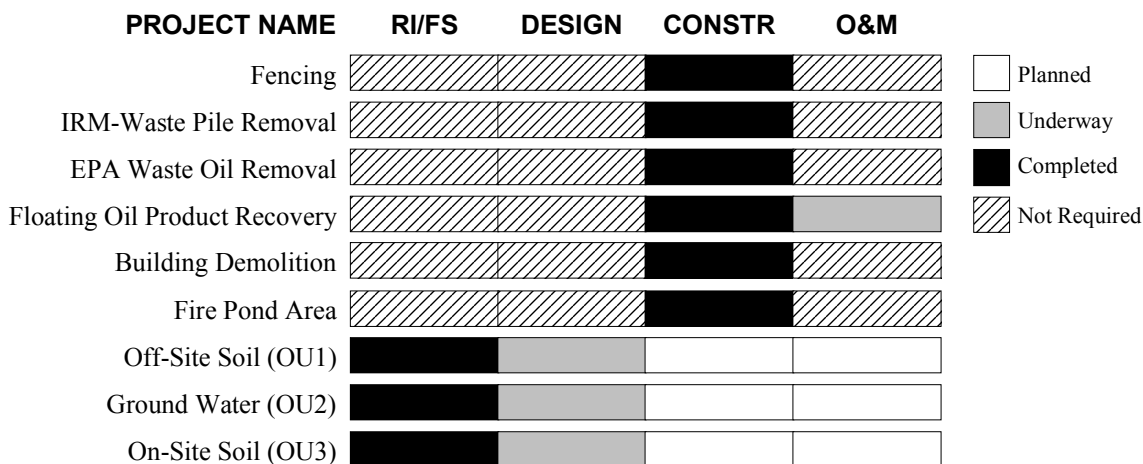
A study by the United States Geological Survey (USGS) concluded that there were multiple sources of the arsenic in the soil, including a minor contribution from natural background, historic application of arsenic-based pesticides and past industrial operations at the Imperial Oil site. The USGS study documented that the arsenic in the soil at four residential properties closest to the site was due to industrial operations. USEPA subsequently issued an Explanation of Significant Differences (ESD) to modify the OU1 ROD to include removal of the arsenic-contaminated soil from four residential properties. Remediation of the arsenic-contaminated soil at the four homes was completed in 1998.

In 1998, NJDEP conducted a Focused Feasibility Study (FFS) to determine the nature and extent of the sediment contamination in Birch Swamp Brook. NJDEP and USEPA concluded based on the findings of the FFS that sediments in the brook from the Fire Pond downstream to Texas Road were contaminated with elevated levels of PCBs and petroleum hydrocarbons. NJDEP also determined that soil at two residential properties located adjacent to Birch Swamp Brook and Texas Road was contaminated with arsenic at levels exceeding New Jersey cleanup criteria. USEPA and NJDEP issued a second ESD for the OU1 ROD in 2002 to add remediation of contaminated Birch Swamp Brook sediments and additional residential soil areas to the OU1 remedy. NJDEP completed the Remedial Design for all remedial components of OU1 in 2002 and cleanup activities are scheduled to begin in 2003.

**Ground water (OU2):** In 1992, after completing the FS for OU2, USEPA issued a ROD with NJDEP concurrence that required installation of an on-site remediation system to extract and treat the contaminated ground water. The Remedial Design for the ground water remediation system was significantly delayed due to initial site access problems and laboratory analytical interferences that made it difficult to accurately delineate the arsenic plume. After a comprehensive investigation to determine the extent of arsenic in the ground water, NJDEP modified the scope of the Remedial Design to address a smaller contaminant plume that is limited to the site boundary. The Remedial Design for the ground water remediation system is scheduled to be completed in 2003.

**On-site soil (OU3):** In 1999, after the FS for the on-site contaminated soil was completed, USEPA issued a ROD with NJDEP concurrence for OU3. The ROD required excavation and off-site disposal of an estimated 80,000 cubic yards of contaminated soil and waste pile material and the off-site disposal of 5,000 gallons of oil product recovered from the site. NJDEP is conducting the Remedial Design for OU3.

**Interim Remedial Measures:** In addition to the work performed by NJDEP to investigate and remediate the three identified Operable Units, USEPA has also implemented four Interim Remedial Measures (IRM) at the site: removal of the heavily contaminated waste filter clay pile in 1991, installation of a recovery system to extract the oil-like floating product layer from the ground water in 1992; demolition and disposal of a dilapidated four-story building in 2000; and removal of contaminated waste material in the wooded area adjacent to Fire Pond in 2002. The floating oil recovery system is currently operating under the supervision of NJDEP. To date, approximately 20,000 gallons of oil have been recovered by the floating oil recovery system and disposed of at an off-site facility.



# Magnolia Avenue Ground Water Contamination

## Various Locations Wall Township & Sea Girt & Manasquan Boroughs Monmouth County

**BLOCK:** Various **LOT:** Various

**CATEGORY:** Non-Superfund  
State Lead

**TYPE OF FACILITY:** Not Applicable  
**OPERATION STATUS:** Not Applicable

**PROPERTY SIZE:** Not Applicable

**SURROUNDING LAND USE:** Residential/Commercial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Tetrachloroethylene Trichloroethylene	Delineating
Surface Water	Tetrachloroethylene	Delineating
Soil	Tetrachloroethylene Trichloroethylene	Partially Removed/Investigating
Air	Tetrachloroethylene	Delineating/Venting

FUNDING SOURCES	AMOUNT AUTHORIZED
Spill Fund	\$10,000
Corporate Business Tax	\$450,000

### SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This case is also known as the White Swan Cleaners Ground Water Contamination site and the Wall Township Ground Water Contamination site. In 1997, the Monmouth County Health Department (MCHD) was notified that analytical testing by a resident had revealed several irrigation wells on Magnolia Avenue in Wall Township were contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE). PCE is a volatile organic chemical that is commonly used as a dry cleaning solvent and degreasing agent. MCHD subsequently performed testing that confirmed irrigation wells in the Magnolia Avenue area were highly contaminated with PCE, as well as with lower levels of trichloroethylene (TCE).













In 1999, MCHD and NJDEP's Remedial Response Element conducted a joint study to delineate the PCE contamination in the ground water and evaluate the risk to Sea Girt's municipal supply wells. The ground water study included sampling additional private irrigation wells, testing the surface water at Wreck Pond in Sea Girt Borough and Spring Lake Heights and monthly sampling of Sea Girt's municipal supply wells. The study revealed that a plume of shallow ground water contamination extended eastward from Route 35 in Wall Township into Sea Girt Borough and a small part of northern Manasquan Borough, and that low levels of PCE were present in the surface water in a portion of Wreck Pond. The federal Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the sampling results and concluded that the ground water was safe to use for irrigation. MCHD and NJDEP also determined that the water from Sea Girt's municipal supply wells met New Jersey Drinking Water Standards. However, as a precautionary measure, Sea Girt Borough installed a treatment system at its well field to remove potential volatile organic contamination. There are no private potable wells at risk of being contaminated due to the ground water plume.

In 2001, NJDEP completed an investigation that identified two defunct dry cleaning establishments and an active gas station in Wall Township as likely sources of the ground water contamination. Extensive soil and ground water contamination was subsequently confirmed at one of the locations, the former White Swan Dry Cleaners on Sea Girt Avenue (now a bank). Based on these findings, in late 2001 NJDEP decided to test the indoor air at residences and a commercial business near the bank for PCE vapors. The testing showed that the indoor air in several adjacent buildings had significantly elevated levels of PCE vapors and the indoor air at some of the more distant properties exhibited low levels of PCE vapors. NJDEP and USEPA installed ventilation systems at several buildings close to the bank to reduce the PCE vapors to acceptable levels. The bank excavated 820 cubic yards of contaminated soil from its property in December 2001 and backfilled the excavation with clean soil under the oversight of NJDEP's Responsible Party Remediation Element. The Potentially Responsible Parties for the two other suspected sources of the ground water contamination, the former Sun Cleaners and a service station on Route 35, have not conducted any investigative or cleanup work at their properties.

# Magnolia Avenue Ground Water Contamination

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In early 2002, USEPA began addressing the Magnolia Avenue Ground Water Contamination site under its Removal Program. Under this program, USEPA is conducting additional indoor air testing at residential and commercial properties, installing subsurface vapor mitigation (ventilation) systems at properties with high levels of PCE vapors and investigating the two other possible sources of the PCE contamination. NJDEP is installing subsurface vapor mitigation systems in buildings where low levels of PCE vapors have been confirmed. As of December 2002, USEPA had tested the indoor air at more than 250 properties in Wall Township, Sea Girt Borough and Manasquan Borough and installed subsurface vapor mitigation systems at nine properties. NJDEP has installed subsurface vapor mitigation systems at 18 residences. Monitoring and maintenance of those systems is underway. NJDEP plans to conduct an investigation to delineate the shallow ground water contamination in 2003. This information will be used to plan future indoor air testing. USEPA has proposed adding this site to the National Priorities List of Superfund sites (NPL).

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M	
IRM-Home Ventilation Systems					 Planned
Sitewide					 Underway
					 Completed
					 Not Required

# Monitor Devices Incorporated

Route 34 (Airport Access Road)

Wall Township

Monmouth County

**BLOCK:** 799      **LOT:** 13

**CATEGORY:** Superfund  
Federal Lead

**TYPE OF FACILITY:** Electronics Manufacturing  
**OPERATION STATUS:** Inactive

**PROPERTY SIZE:** 2.0 Acres

**SURROUNDING LAND USE:** Commercial/Industrial

## MEDIA AFFECTED

Ground Water

## CONTAMINANTS

Volatile Organic Compounds  
Metals

## STATUS

Further Delineation Required

Soil

Volatile Organic Compounds  
Metals

Delineated

## FUNDING SOURCES

Superfund  
General State Fund

## AMOUNT AUTHORIZED

\$1,200,000  
\$396,000

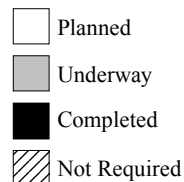
## SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Monitor Devices operated a metals plating and circuit board manufacturing facility at this site between 1977 and 1981. The property is currently occupied by a furniture business. In 1980, during an inspection by the Monmouth County Health Department, two discharge pipes were noted at the rear of the main building. Sampling conducted by NJDEP revealed that the soil and ground water near the pipes were contaminated with solvents, acids and heavy metals. In addition, drums and other containers were stored outdoors and were in poor condition. The high permeability of the soil and the shallow ground water table created a potentially easy route for contaminants to enter the underlying aquifers. NJDEP ordered Monitor Devices to investigate the contamination at the site and take appropriate remedial actions, but the company did not comply. Monitor Devices ceased operations in 1981 and subsequently declared bankruptcy.

In 1986, USEPA added the Monitor Devices facility to the National Priorities List of Superfund sites (NPL) and NJDEP began a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of the contamination and identify cleanup alternatives. NJDEP completed Phase I of the RI in 1989. USEPA is currently conducting a Phase II RI to further delineate the extent of the ground water contamination, as well as a Focused Feasibility Study (FFS) for an interim soil remedial action. USEPA has concluded that the contamination at the site does not present an immediate risk to human health or the environment.

## PROJECT NAME      RI/FS      DESIGN      CONSTR      O&M

Sitewide



# Waldick Aerospace Devices Incorporated

2121 Route 35

Wall Township

Monmouth County

**BLOCK:** 733      **LOT:** 5

**CATEGORY:** Superfund  
Federal Lead

**TYPE OF FACILITY:** Machinery Manufacturing  
**OPERATION STATUS:** Inactive

**PROPERTY SIZE:** 1.72 Acres

**SURROUNDING LAND USE:** Commercial

## MEDIA AFFECTED

Ground Water

## CONTAMINANTS

Volatile Organic Compounds  
Metals

## STATUS

Delineated

Soil

Volatile Organic Compounds  
Petroleum Hydrocarbons  
Acids  
Metals

Treated/Removed

## FUNDING SOURCES

Superfund  
1981 Bond Fund

## AMOUNT AUTHORIZED





\$14,275,000  
\$600,000

## SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Waldick Aerospace Devices manufactured mechanical parts for spacecrafts at this site from 1979 to 1985. During the first three years of operation, contaminated wastewater and waste oil were discharged directly onto the ground at the facility. Sampling conducted by local officials and NJDEP between 1982 and 1984 confirmed that the ground water was contaminated with metals and volatile organic compounds, and the contamination had migrated off site. These findings prompted USEPA to add Waldick Aerospace Devices to the National Priorities List of Superfund sites (NPL) in 1986. The company has filed for bankruptcy.

In 1987, USEPA completed an initial Remedial Investigation and Feasibility Study (RI/FS) for the site and signed a Record of Decision (ROD) with NJDEP concurrence that required in-situ treatment of the organic-contaminated soil and excavation and off-site disposal of one area of metals-contaminated soil. The ROD also required a supplementary RI/FS to evaluate the extent of the ground water contamination. However, the selected soil remedy did not conform to federal regulations for disposal of hazardous materials that were promulgated after the ROD was signed. In addition, although USEPA concluded based on the RI/FS that the soil contaminated with volatile organic compounds and petroleum hydrocarbons was divided into two discrete areas according to the presence or absence of metals, sampling performed during the Remedial Design indicated that both areas were contaminated with metals. Based on this finding, USEPA modified the ROD in 1991 to require on-site thermal treatment to remove organic compounds from the soil and off-site treatment and disposal of the metals-contaminated soil. USEPA demolished two of the buildings and completed the soil remedial action in 1993.

In 1991, after completing the supplementary RI/FS, USEPA signed a second ROD with NJDEP concurrence that required installation of a ground water remediation system to extract and treat the off-site contaminated ground water. However, sampling conducted during the Remedial Design showed significantly reduced levels of contaminants in the ground water. USEPA is therefore performing an additional phase of ground water monitoring to evaluate contaminant trends. If the additional monitoring indicates the contaminant plume is dissipating, USEPA may revise the ground water remedy specified in the 1991 ROD.

PROJECT NAME	RI/FS	DESIGN	CONSTR	O&M	
Soil					 Planned
Ground Water-Plume					 Underway
					 Completed
					 Not Required

# William Hurley Industrial Complex

## Lakewood-Farmingdale Road

Howell Township

Monmouth County

**BLOCK:** 49      **LOT:** 30-33, 38, 44, 45, 46-50  
221                      4  
222                      15 & 16  
223                      2

**CATEGORY:** Non-Superfund  
State Lead, IEC

**TYPE OF FACILITY:** Electronics Manufacturing  
**OPERATION STATUS:** Active

**PROPERTY SIZE:** 212 Acres

**SURROUNDING LAND USE:** Residential/Industrial/Commercial

<b>MEDIA AFFECTED</b>	<b>CONTAMINANTS</b>	<b>STATUS</b>
Ground Water	Volatile Organic Compounds Metals	Delineating
Potable Water	Volatile Organic Compounds	Treating
Soil	Volatile Organic Compounds Metals	Delineating
Surface Water	Volatile Organic Compounds Metals	Investigating
Sediments	Volatile Organic Compounds Metals	Investigating
Building Interiors	Volatile Organic Compounds Metals	Investigating

<b>FUNDING SOURCES</b>	<b>AMOUNT AUTHORIZED</b>
Spill Fund	\$80,000
1981 Bond Fund	\$6,000
Responsible Party Settlement Fund	\$64,000

### **SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:**

This site is also known as Frequency Engineering Laboratories Inc. It occupies a portion of the William Hurley Industrial Complex on Central Avenue, a small road that intersects with Lakewood -Farmingdale Road. Marsh Bog Brook flows northwest of the complex. Frequency Engineering has manufactured electronic military hardware at the complex since 1964. For approximately 25 years, until 1989, the company discharged rinse waters from its metals plating operations into a drainage ditch behind the facility. Sampling conducted by Frequency Engineering in 1996 indicated that discharges at the site had contaminated the soil and ground water with volatile organic compounds and metals. The following year, Frequency Engineering entered into a Memorandum of Agreement (MOA) in which it agreed to investigate and remediate the contamination under the supervision of NJDEP's Responsible Party Remediation Element.

In 1999, trichloroethylene (TCE), a chlorinated volatile organic compound, was discovered in a private potable well at a downgradient commercial business and Frequency Engineering was identified as the most likely source of the contamination. A Point-of-Entry Treatment (POET) system was installed on the well with funds provided by NJDEP to supply potable water for the occupants. NJDEP's Remedial Response Element and the Monmouth County Health Department subsequently sampled additional nearby private potable wells but did not find any others that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards.

In 2000, Frequency Engineering declared bankruptcy. NJDEP terminated the MOA the following year after the company indicated it would no longer implement the work specified in the agreement. NJDEP's Remedial Response Element began a Remedial Investigation/Remedial Action Selection (RI/RAS) in 2002 to delineate the contamination at the site and evaluate remedial alternatives. The RI/RAS will include sampling of the soil, ground water, surface water, sediments, building interiors and septic systems. The work is being funded in part with \$280,000 that NJDEP received from the bankruptcy settlement.

# William Hurley Industrial Complex

(Continued from previous page)

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M	
Sitewide					<div><div></div>Planned</div> <div><div></div>Underway</div> <div><div></div>Completed</div> <div><div></div>Not Required</div>

# Zschiegner Refining Company

1442 Maxim Southard Road

Howell Township

Monmouth County

**BLOCK:** 36      **LOT:** 23

**CATEGORY:** Superfund  
Federal Lead

**TYPE OF FACILITY:** Metals Recovery  
**OPERATION STATUS:** Inactive

**PROPERTY SIZE:** 6.1 Acres

**SURROUNDING LAND USE:** Residential/Rural

<b>MEDIA AFFECTED</b>	<b>CONTAMINANTS</b>	<b>STATUS</b>
Soil	Metals	Delineating
Surface Water	Metals	Delineating
Sediments	Metals	Delineating
Ground Water	Metals	Delineating

## FUNDING SOURCES

## AMOUNT AUTHORIZED

Superfund	\$1,640,000
Spill Fund	\$6,000

## SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Zschiegner Refining Company operated from 1964 to 1992 as a precious metals recovery facility. Operations included the chemical stripping of precious metals from watch bands, film and electrical components. Haystack Brook, its associated wetlands and a tributary to Haystack Brook flow through the property. In 1992, the facility was raided by the Federal Drug Enforcement Agency for illegally manufacturing methamphetamine. Authorities discovered approximately 3,000 different chemicals were being improperly stored at the site, including acids, caustics and potentially explosive and reactive compounds.

In 1992, USEPA began a preliminary investigation to assess environmental conditions at the site. USEPA also implemented an interim removal action, repackaging and disposing of approximately 2,000 gallons of acidic solutions, 1,600 gallons of basic solutions and 1,400 small containers of hazardous substances between 1992 and 1993. Sampling performed during the preliminary investigation indicated that the soil, surface water and sediments at the property were contaminated with metals. Based on these findings, USEPA added the Zschiegner property to the National Priorities List of Superfund sites (NPL) in 1998. Later that year, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination in the soil, ground water, surface water and sediments and evaluate cleanup alternatives. Sampling of nearby private potable wells that was conducted in 1998 did not reveal any contaminants at levels exceeding New Jersey Drinking Water Standards. USEPA will use the findings of the RI/FS to select the final remedial actions for the site, which will be outlined in a Record of Decision (ROD).

<b>PROJECT NAME</b>	<b>RI/FS</b>	<b>DESIGN</b>	<b>CONSTR</b>	<b>O&amp;M</b>
Sitewide				

Planned

Underway

Completed

Not Required